Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

and with a constant exposure of $0^s.13$. The images are quite dense, so that good paper prints can be made from them. Such results have a theoretical importance in their bearing on the general problem of photographing small contrasts—as in photography of the Corona, for example. It will be of value also to be able to photograph the moon or one of the inferior planets during a close approach to a fixed star, either day or night, which can now be done under favorable conditions.

The first photographs of stars were made by the two BONDS, at the Harvard College Observatory in the years 1850–60. At first an exposure of ten seconds or more was necessary to obtain an impression of *Alpha Lyræ* on a dark sky! With our present plates it is difficult to get an exposure quick enough for such a picture.

To appreciate the amazing delicacy of sensitive plates, let any one look at the intensely bright sky at noon and reflect that modern plates are competent to register the extremely small contrast between the light of a star and the luminous background of the daylight sky on which it is projected. E. S. H. AND W. W. C.

APPOINTMENT OF MR. LEUSCHNER IN THE UNIVERSITY OF CALIFORNIA.

Mr. A. O. LEUSCHNER has been appointed to be Instructor of Mathematics in the University of California, and will take up his new duties about September 15, 1890. E. S. H.

ABSORPTION OF THE PHOTOGRAPHIC RAYS OF LIGHT IN THE EARTH'S ATMOSPHERE [BY DR. J. SCHEINER, ASTROPHYSIKALISCHES OBSERVATORIUM, POTSDAM].

This subject has been spoken of in various places (among others, in the *Publ.* A. S. P., vol. I, pp. 51, 63, 64, 114, 121). Observations to determine the absorption have been made at Harvard College Observatory, at Potsdam and at Mount Hamilton. No results have yet been published, and therefore the following paragraphs from an important article by Dr. SCHEINER in the *Astronomische Nachrichten*, No. 2969, will be of interest. Dr. SCHEINER says:

"It is to be expected that the effect of atmospheric extinction of light upon measures of photographic magnitudes will be very nearly the same as the same effect upon a ray of that particular wave-length which has the maximum photographic influence upon the sensitive plate. This maximum for bromide-of-silver plates is near wave-length 434$\mu\mu$.

"In No. 2464 of the *Ast. Nach.** Dr. G. MUELLER has printed an extinction-table for different wave-lengths. This table does not extend so far as wave-length 434, but the corresponding values can be extrapolated with great accuracy."

[These values are as follows:

Photographic Atmospheric Absorption in Magnitudes for a Wave-Length 434$\mu\mu$.

ALTITUDE.	ABSORPTION.	ALTITUDE.	ABSORPTION.
15°	1.28 mags.	23°	0.66 mags.
16	1.18 "	24	0.60 "
17	1.08 "	25	0.55 "
18	1.00 "	26	0.50 "
19	0.93 "	27	0.47 "
20	0.86 "	28	0.45 "
21	0.80 "	29	0.42 "
22	0.73 "	30	0.40 "]†

"From my observations (in the *Pleiades*) of November 22, I found the increase in magnitude from 18°.6 to 29°.0 altitude to be 0.53 magnitude. The table gives exactly the same result. Although this complete agreement is naturally but accidental, yet it indicates that the assumption just made is approximately correct, and that MUELLER's extinction-table can be used with advantage until the publication of further investigations on this subject."—E. S. H.

MEDALS OF THE COMETS OF 1618 AND 1680.

Apropos of a note on the medal of the Comet of 1680 (*Publ.* A. S. P., vol. II, p. 124), Professor DUNÉR, Director of the Observatory of Upsala, in a letter recently received, calls attention to passages from two works‡ by J. H. MAEDLER, which describe a somewhat similar medal for the Comet of 1618. The medal is said by

---

* Not No. 2964, as printed in the *Ast. Nach.* 2969.

† The paragraph in brackets was obligingly communicated by Dr. SCHEINER in a private letter.

‡ These works are a translation of Dr. J. R. HIND's book on *Comets* (p. 116) and MAEDLER'S *Astronomische Briefe.* Neither of these is in the Lick Observatory Library.